

# DISCUSSION *Paper*

9/98

STATISTICS AND DATA COLLECTION  
CONCERNING INDIGENOUS AUSTRALIANS

*Tony Barnes*

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# Statistics and Data Collection Concerning Indigenous Australians

Tony Barnes

North Australia Research Unit  
DISCUSSION PAPER No. 9/1998

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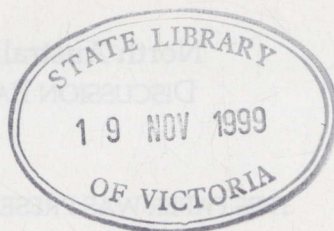
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## North Australia Research Unit The Australian National University

In 1995, the North Australia Research Unit's (NARU) position within the Research School of Pacific and Asian Studies (RSPAS) was reviewed within the Institute of Advanced Studies. Following a report by the review committee, NARU underwent strategic restructuring in terms of management. For a short period NARU was relocated to the National Centre for Development Studies but, in August 1997, the Unit reverted to its former position and is directly accountable to the Director of RSPAS, The Australian National University.

The location of the Unit in Darwin has made it something of a frontier research post for more than two decades. Opened in the early 1970s, the aggregate of scholars over the years, and even today, is a reflection of the inter-disciplinary nature of the research carried out at the Unit.

A large portion of that research has focused on the Aboriginal and Torres Strait Islander peoples of Australia and, in that context, on the social, cultural, political, economic and development issues which are part of northern Australia. The range of research projects which are underway at any particular time depend very much on the priorities of the individuals who are engaged in the actual research. Aboriginal and Torres Strait Islander issues are of continuing importance in northern Australia and, consequently, to NARU. The reasons for this would be obvious to anyone who visits northern Australia—outside of Darwin, indigenous people comprise the majority of the population in the north.

In addition to NARU's traditional research there is now a very strong focus on governance and development in northern Australia, and in regions further north, particularly east Asia. Scholarly interest in this regional relationship has been substantial, adding considerably to the depth and breadth of NARU's cross-disciplinary role with the ANU.

As an integral part of the ANU, and RSPAS, the Unit offers scholars from Australia and around the world a unique opportunity to conduct research in one of the most remote academic outposts in Australia—perhaps, the world. NARU has excellent resources and site facilities, including a social science library which boasts a comprehensive collection of material on

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## Guidelines for Contributors

Papers should not exceed ten thousand words. The Harvard system of referencing is recommended, and footnotes rather than endnotes are preferable. The styling method of this paper can be used as a guide. Authors are requested to send three copies of their paper and one copy on disk; please include an abstract and short profile of the author.

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# Statistics and Data Collection Concerning Indigenous Australians

Tony Barnes\*

## Introduction - Population Estimates and Rate Statistics

For any population group, the information needed for input into successful benchmarking and performance monitoring is often contained in the answers to two types of quite simple questions, or variants of them. In its simplest form, the first question maybe expressed as:

On date 'abc', how many Indigenous people live in 'xyz' locality, region, state or other geographic area?

Answers to questions such as these are used in compiling the estimates of the size and composition of the population by the Australian Bureau of Statistics (ABS). These estimates are derived by adjusting counts obtained from the 5-yearly Census of Population and Housing. For the total Australian population the methods used are tried and tested and yield highly reliable estimates, referred to as Estimated Resident Populations (ERPs). For the Indigenous population, the ABS first prepared and published *experimental* ERP figures in 1994. These were based on the population counts from the 1991 Census. ABS has recently published a new set of experimental Indigenous ERP based on the results of the 1996 Census. The methodology for deriving Indigenous ERP is more complex and with greater uncertainties than for the total Australian population, hence the 'experimental' qualifier.

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The second type of question for which answers are needed for benchmarking and performance monitoring purposes can be expressed as:

At date 'abc' and locality 'xyz', what proportion of the Indigenous population have 'ijk' characteristic?

The key statistic for date 'abc' and locality 'xyz' is the ratio:

$$\frac{\text{the number of people with 'xyz' characteristic}}{\text{the number of people in the population}}$$

The denominator requires the same type of Census-based population estimates as the first question. The numerator is usually a statistic calculated as a by-product from data gathered in a government administrative data collection. For the total Australian population statistics derived in this way can be both valid and reliable. For Indigenous people, statistics are generally considerably less reliable and possibly invalid. Increases in Indigenous Census counts in 1996 greatly increased the prospect of serious biases occurring in ratios such as these, this phenomenon is referred to here as 'denominator shift'.

This paper will explore some uncertainties attached to Indigenous population estimates and Indigenous statistics derived from administrative data sets. The underlying issue of definition and measurement of Indigenous status will first be explored. Recent and planned advances by ABS to improve the quality of Indigenous Census enumeration, Indigenous population estimation methodology, and the quality of Indigenous statistics derived from administrative collections will also be discussed.

## Meaning, Definition and Measurement of Indigenous Status

The definition of a population group is central to the collection, use and interpretation of any statistical information purporting to be about the group. Different groups and agencies operating from different perspectives may have different definitions of Indigenous.

### Indigenous Status from the View of Indigenous People

It is not appropriate for this paper to attempt to describe how Indigenous people would choose to describe or define the concept of being an

Indigenous Australian. Suffice it to say that the Indigenous community, collectively, are the only group who can speak from this perspective and their views on the concept should be paramount in discussion and decisions on this issue.

### Indigenous Status from the View of Government Activities

While the position of state and territory governments is not clear, Commonwealth government agencies generally adopt and work with a definition which is commonly referred to as the Commonwealth Working Definition which states:

An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives.

This definition was gradually developed by the Department of Aboriginal Affairs between 1967 and 1978 and received Cabinet endorsement at the end of this process. Although the full definition is sometimes not seen on Commonwealth government administrative forms, it is the definition which underpins most activities and programs of the Commonwealth. Some programs (eg Abstudy) require evidence of the three components and the claiming individual must sign a declaration that they satisfy the definition.

### Indigenous Status and the Australian Constitution and the Law

No uniform definition of 'Aborigine' or of 'Aboriginal descent' has been adopted by legislatures throughout Australia (Garth Nettheim, *The Laws of Australia*, Law Book Company: Sydney, 1993, Volume 1). Despite this, the Commonwealth Working Definition, which was developed following the change in the constitution in 1967, does have formal legal status. Referring to this definition, *The Laws of Australia* notes that,

The elements of this definition were endorsed by members of the High Court as relevant to the interpretation of the constitutional power in *Commonwealth v Tasmania (Tasmanian Dam Case)* (1983) 158 CLR 1 [57 ALJR 450, 46 ALR 625].

However, some legal judgements handed down since the adoption of the Commonwealth Working Definition have accepted that proof of Aboriginal descent may be sufficient without the need for proof of self-identification and community acceptance.



Overall, the legal position is complex. One study (JC McCorquodale, PhD Thesis 1985: *A History of Law and Injustice, 1829-1985*), noted 700 pieces of legislation from the time of white settlement and 'no less than 67 identifiable classifications, descriptions or definitions'.

## Indigenous Status from the Statistical Perspective

### Precise or Loose Meaning and Interpretation

There are two opposing views about the attention which should be given to determining questions and definitions for the population group and the precision which should be attributed to statistics about Aboriginal and Torres Strait Islander people.

One view states that statistics about Indigenous people resulting from major collections should be regarded as broadly indicative of the population group and should not be interpreted too precisely. Behind this opinion is a view that the majority of respondents generally do not intellectualise the words of the question to which they are responding. Rather, they merely focus on the words 'Aboriginal' or 'Torres Strait Islander' to determine their response. Furthermore, high levels of accuracy are doubtful, because in some administrative collections, information about people's Indigenous status is often determined by the record taker's visual observations or prior knowledge or perceptions. These practices reinforce a view that it is pointless being very subtle about the precise form of questions and definitions. Instead, it is argued, that the sensible pragmatic approach is to be cautious and broad in one's interpretation of Indigenous statistics and not worry too much about the words used in questions.

The alternative view states that precision in definition and question wording are of great importance. Failure to describe, by definition, question recording procedures, precisely what is to be measured and how it hinders the prospects of deriving accurate statistics about the population group. In which case, it is argued, there are poor prospect obtaining Indigenous statistics of sufficient quality to undertake accurate benchmarking and performance monitoring. This view does not deny that current data collection practices (of both record taker and respondents) are not perfect. On the contrary, it accepts they are currently imperfect but that they can either be improved or the degree of imperfection can be measured and adjusted for.

Both these views may have some truth in them. Users of current and past statistics should be aware of the possibility of the former view prevailing on some occasions, but current and future data collectors should be striving to increase our understanding of issues underlying the collection of Indigenous status data, so that the greater precision sought by the latter view is achievable.

#### The ABS Standard for Indigenous Status and Census Questions

ABS has developed standard methods for classifying important variables. For Indigenous Status a standard was first promulgated in 1995 (with an expectation that it would be reviewed before 2001). The Standard recommends that, to determine Indigenous status, all respondents in data collections where that status is required should answer the following question:

Are you of Aboriginal or Torres Strait Islander origin?

For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.

- No
- Yes, Aboriginal
- Yes, Torres Strait Islander

The Standard recommends minor variations to this question where the respondent is not the subject of the data collection, for example, in the case of deceased persons. The above question and its answer set were used in the 1996 Census. Table X displays the questions used in all ABS Censuses since 1911 from which counts of the Aboriginal and Torres Strait Islander population have been derived.

The current ABS Standard for Indigenous Status is founded on the Commonwealth Working Definition with its three components of:

- descent;
- self identification; and
- community acceptance.

As is pointed out in the ABS Standard documentation, the current operational definition (ie the approach adopted in practice) of the Standard does not attempt to collect information about the third component of the definition, and, in fact, the form of the question, 'Are you of Aboriginal or

Torres Strait Islander origin?' is based only on the descent component. However, the Standard also points out, '... some respondents will interpret the question to mean both descent and identification'.

### Acceptance and Implementation

The ABS Standard for Indigenous Status has been accepted by a number of agencies, notably by all the Registrars of Births and Deaths for inclusion on death notification forms, and the National Health Data Committee, a committee of the National Health Information Management Group. As a consequence of the National Health Information Agreement the standard is automatically to be adopted by all Health departments. Most Health departments have indicated their intention to implement the standard but, at this stage, the standard question is not incorporated into many administrative health collections.

Consistency between the approaches used for Indigenous Status in administrative collections and the corresponding Census counts on which Indigenous population estimates are based is highly desirable. It is for reasons of consistency, rather than strong allegiance to the 'origin' based question, that has led to the ABS standard being adopted by most health agencies. In particular, it is in recognition of the fact that ratio statistics calculated before 2001 will use denominators derived from ABS population statistics, themselves all based on the standard question used in the 1996 Census.

## Uncertainties Attached to Population Estimates

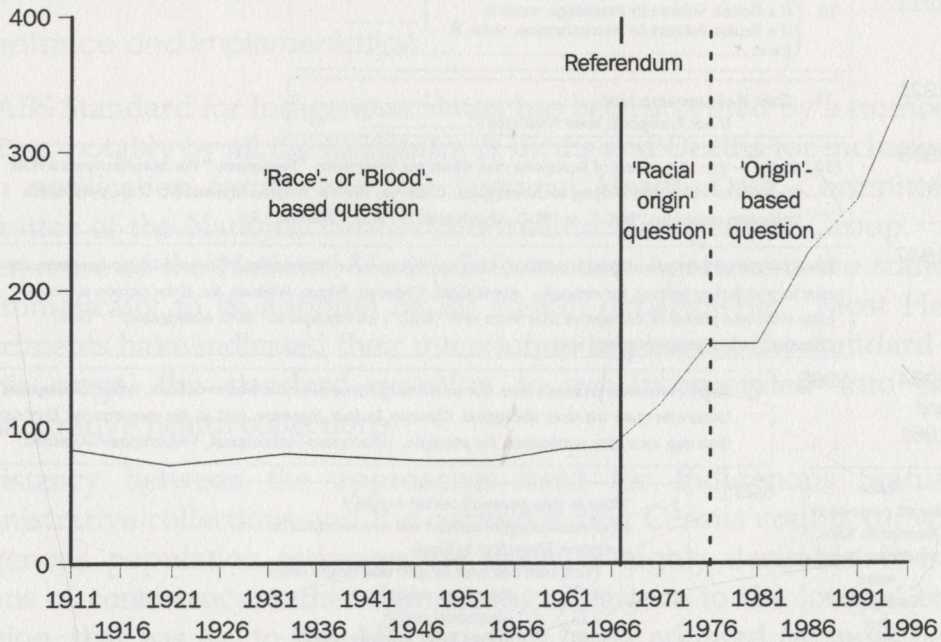
### Counts—Large Non-Biological Increases

All Censuses since 1981 have used the same question to determine Indigenous Status—'Are you of Aboriginal or Torres Strait Islander origin?' The instruction accompanying the question was changed in 1996 to allow persons with both Aboriginal and Torres Strait Islander origin to nominate both origins. Figure 1 presents Census questions used during this century and Figure 2 presents the population counts derived from them for the Indigenous population. Although the same question has been used in the last four Censuses it is apparent that not all people have answered the question consistently over time.

Figure 1: Census Questions, 1911–1996

1911	10. $\left. \begin{array}{l} \text{If a British Subject by Parentage, write P} \\ \text{If a British Subject by Naturalization, write N.} \end{array} \right\} \dots\dots\dots$ Race:..... $\rightarrow$	
1921	11. State if of European race : ..... If not European, state what race : .....	
1933	(12) Race. — For all persons of European race wherever born write "European." For non-Europeans state the race to which they belong as Aboriginal, Chinese, Hindu, Negro, Afghan, &c. If the person is a half-caste write also "H.C.", as "H.C. Aboriginal," "H.C. Chinese," &c.	
1947	Race. — For all persons of European Race, wherever born, write "European." For non-Europeans state the race to which they belong. for example, Aboriginal, Chinese, Negro, Afghan, &c. If the person is a half-caste with one parent of European race write also "H.C.", for example as "H.C. Aboriginal," "H.C. Chinese," &c. (See instructions also.)	
1954 and 1961	13 Race. State each person's race. For persons of European race wherever born, write "European". Otherwise state whether Aboriginal, Chinese, Indian, Japanese, etc., as the case may be. If of more than one race give particulars, for example, $\frac{1}{2}$ European- $\frac{1}{2}$ Aboriginal, $\frac{3}{4}$ Aboriginal- $\frac{1}{4}$ Chinese,	
Race For all persons of European Race, wherever born, write "European." For non-Europeans state the race to which they belong for example, "Aboriginal," "Chinese," "Negro," "Afghan," &c. If the person is half-caste with one parent of European race write also "H.C.", for example "H.C. Aboriginal," "H.C. Chinese," &c. (See instructions also.)	1971	5. What is this person's racial origin ? (If of mixed origin indicate the one to which he considers himself to belong) (Tick one box only or give one origin only) 1 <input type="checkbox"/> European origin 2 <input type="checkbox"/> Aboriginal origin 3 <input type="checkbox"/> Torres Strait Islander origin 4 <input type="checkbox"/> Other origin (give one only) .....
	1976	18. What is each person's racial origin ? • If of mixed origin, indicate the one to which the person considers himself/herself to belong. • Tick one box only for each person European origin..... <input type="checkbox"/> 1 Aboriginal origin..... <input type="checkbox"/> 2 Torres Strait Islander origin..... <input type="checkbox"/> 3 Other origin..... <input type="checkbox"/> 4 $\downarrow$ State one only.....
	1981 and 1986	9. Is the person of Aboriginal or Torres Strait Islander origin ? • For persons of mixed origin, indicate the one to which they consider themselves to belong No..... <input type="checkbox"/> 1 Yes, Aboriginal..... <input type="checkbox"/> 2 Yes, Torres Strait Islander.. <input type="checkbox"/> 3
	1991	13 Is this person of Aboriginal or Torres Strait Islander origin ? • For persons of mixed origin, indicate the one to which they consider themselves to belong. ( ) No ( ) Yes, Aboriginal ( ) Yes, Torres Strait Islander
	1996	Mainstream household form(a) 14 Is the person of Aboriginal or Torres Strait Islander origin ? • For persons of both Aboriginal or Torres Strait Islander origin, mark both 'yes' boxes <input type="radio"/> No <input type="radio"/> Yes, Aboriginal <input type="radio"/> Yes, Torres Strait Islander
	1996	Special Indigenous personal form(a) 10 Are you of Aboriginal or Torres Strait Islander origin ? • For persons of both Aboriginal or Torres Strait Islander origin, mark both 'yes' boxes <input type="radio"/> No <input type="radio"/> Yes, Aboriginal <input type="radio"/> Yes, Torres Strait Islander

Figure 2: Indigenous Counts (plus augmented estimates), Censuses 1911–1996



Note: Torres Strait Islanders were considered to be non-Aboriginal for the 1947, 1954 and 1961 Censuses.  
 Source: Smith 1980; ABS unpublished data, census counts 1981 to 1996.

The increases between successive Censuses (42% 1981-1986, 17% 1986-1991, 33% 1991-1996) are very large, and larger than would be expected from natural increase and migration. Thus, coverage of Indigenous people may have substantially increased in each of the Censuses from 1981 to 1991 and some people who reported not having Indigenous origin in one Census, appeared to have responded differently in the next. Analysis reveals that, between 1991 and 1996, about half of the increase in counts was associated with natural increase of one type or another. The remaining increase was due to people changing their response to the 'origin' question between 1991 and 1996 or to improved Census coverage of Indigenous people. Quality control procedures associated with Census enumeration in 1991 and 1996 suggest that the former explanation may predominate.

## Interpreting Indigenous Census Counts and Population Estimates

The precise meaning of the counts of people responding as Indigenous to the 'origin' question over the four Censuses is, therefore, uncertain. Although some respondents will respond to the 'origin' question literally, in terms of their Aboriginal or Torres Strait Islander biological descent, it is clear that not all respondents could have answered in this way at all four Censuses. It is possible that the Indigenous counts more closely represent the number of people who 'identify themselves' as Aboriginal or Torres Strait Islander at the time (including perhaps people who do not have Indigenous origin). Or, more precisely, the Indigenous counts may represent a subset of those people who 'identify themselves', that is those people who choose to 'identify themselves on a Census Form'. The number of people who are choosing to do this, for whatever reason, has apparently been increasing in recent censuses.

It is impossible to avoid the conclusion that the counts of Indigenous people obtained from any one Census bear an uncertain (and changing by comparison with the next Census) relationship with either the concept of a population defined by Aboriginal or Torres Strait Islander biological descent or a population group based around the social concept of self-identification. We can go no further than to say that the population represented by the counts is 'those people who chose to respond affirmatively to the Indigenous status question'.

Thus, despite a common question being used in four successive Censuses, the counts of Indigenous people should not be regarded as a consistent time series in any fundamental sense. The ABS recognises the need for a consistent basis for population figures and, as a part of early preparation for the 2001 Census, will be considering whether there is a case for considering alternative approaches to collecting this information which might allow more satisfactory interpretation of the resulting counts.

## Increases in Indigenous Population Estimates 1991–1996

Table 1 shows the experimental Estimated Residential Population (ERP) for the Indigenous Population and the ERP for the Total Population of each State and Territory for 30 June 1991 and 30 June 1996. Large percentage increases are apparent in the Indigenous population for many States and Territories; these are higher in the south and east and lower in the northern

and western states and territories. Increases are much smaller for the total population.

Table 1: Experimental Estimated Resident Populations for Indigenous People

	ESTIMATED RESIDENT POPULATION					
	1991 Census Base			1996 Census Base		
	1991		1996		Diff. 1996-1991 estimates	
	Indig. '000	Total '000	Indig. '000	Total '000	Indig. %	Total %
NSW	75.0	5898.7	106.3	6203.9	41.7	5.2
Victoria	17.9	4420.4	22.6	4560.8	26.3	3.2
Q'land	74.2	2961.0	100.5	3339.1	35.4	12.8
SA	17.2	1446.3	21.3	1474.4	23.8	1.9
WA	44.2	1636.1	54.1	1765.7	22.4	7.9
Tasmania	9.5	466.8	14.7	474.6	54.7	1.7
NT	43.8	165.5	49.6	181.9	13.2	9.9
ACT	1.6	289.3	3.0	308.0	87.5	6.5
<b>Australia</b>	<b>283.6</b>	<b>17284.0</b>	<b>372.1</b>	<b>18311.5</b>	<b>31.2</b>	<b>5.9</b>

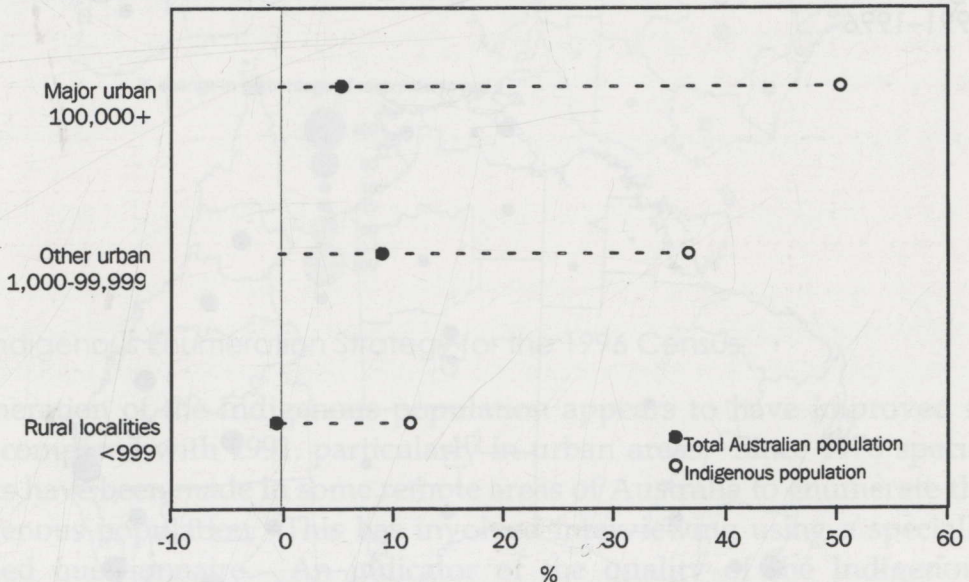
Figure 3 below displays similar percentage increases (but for Census place of enumeration counts rather than ERP) calculated for 3 different location groups (major urban >100,000, other urban 1,000-99,999 and localities <1,000) rather than for States and Territories. The figure illustrates that the increase in the Indigenous Census counts were highest for large cities and lowest for small centres. Overall, the increase in Indigenous counts for small centres was comparable with the expected rate of natural increase for these populations. By contrast, the increase in the Indigenous population counts for larger towns and cities was a number of times greater than expected from natural increase. This pattern is displayed geographically by the wide range of differences in percentage increases between 1991 and 1996 in the Indigenous count across the 36 ATSI regions (from less than zero in the Cooktown Region of north Queensland to as much as 70% in

the Brisbane region [see Figure 5]). The impact of inter-state and inter-area mobility on these changes has yet to be examined but is not thought to be large.

These increases in urban counts are not a new phenomenon, they have been occurring for the past 30 years, throughout the period when Indigenous people counts have been increasing at an extremely fast unexplainable pace. This has resulted in quite remarkable changes in the apparent distribution of the Indigenous populations. Apparent because it is due, in the main, to unexplainable non-biological increases rather than population shifts from rural to urban areas (see Figure 4).

Figure 3: Change in Counts by Place of Enumeration for Localities of Different Sizes

CHANGE IN PLACE OF ENUMERATION COUNTS, SIZE OF LOCALITY — 1991 TO 1996



Note: Excludes overseas visitors. 1996 figures exclude Christmas Island and Cocos (Keeling) Islands.



Figure 4: The Urban/Rural Distribution of the Indigenous Population of Australia

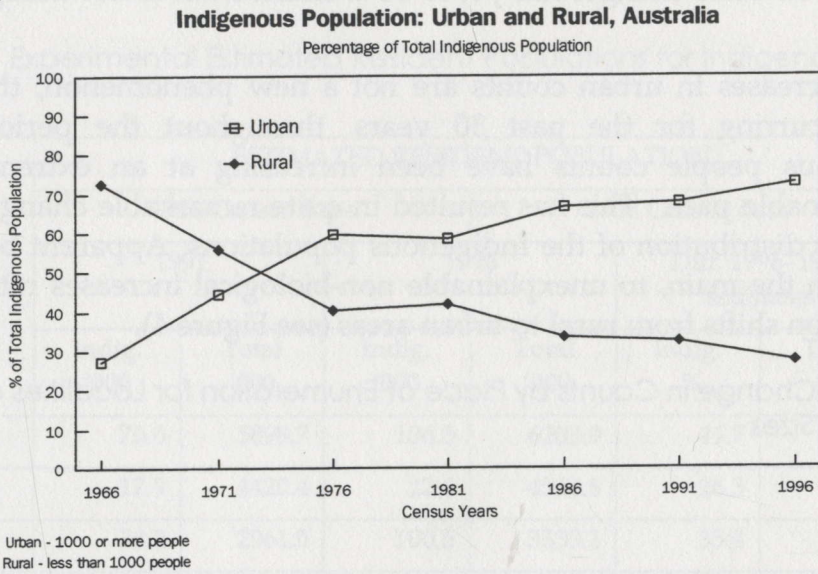


Figure 5: Percentage Increase in Indigenous Counts, ATSI Regions, 1991-1996

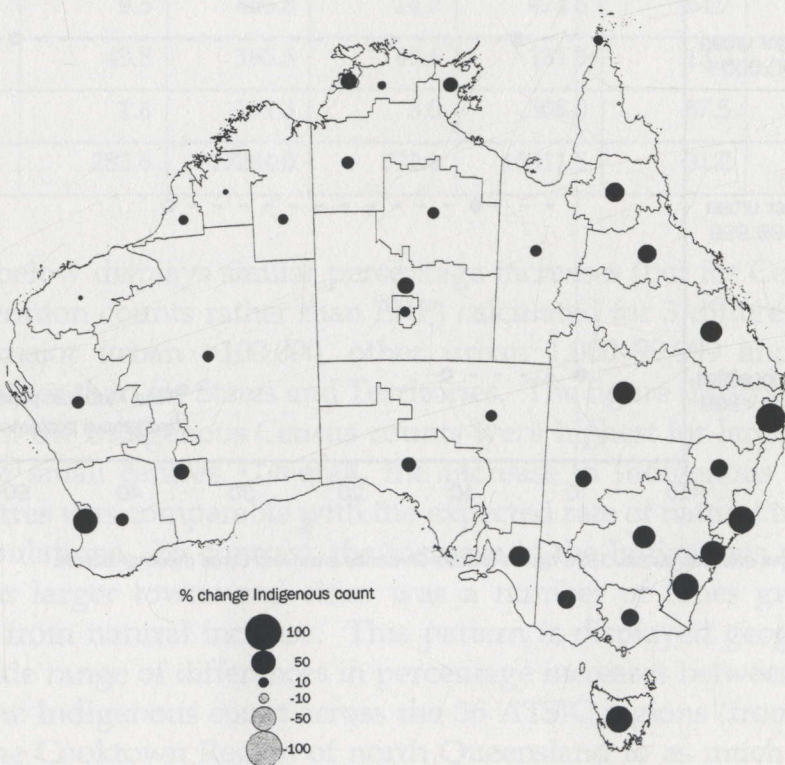
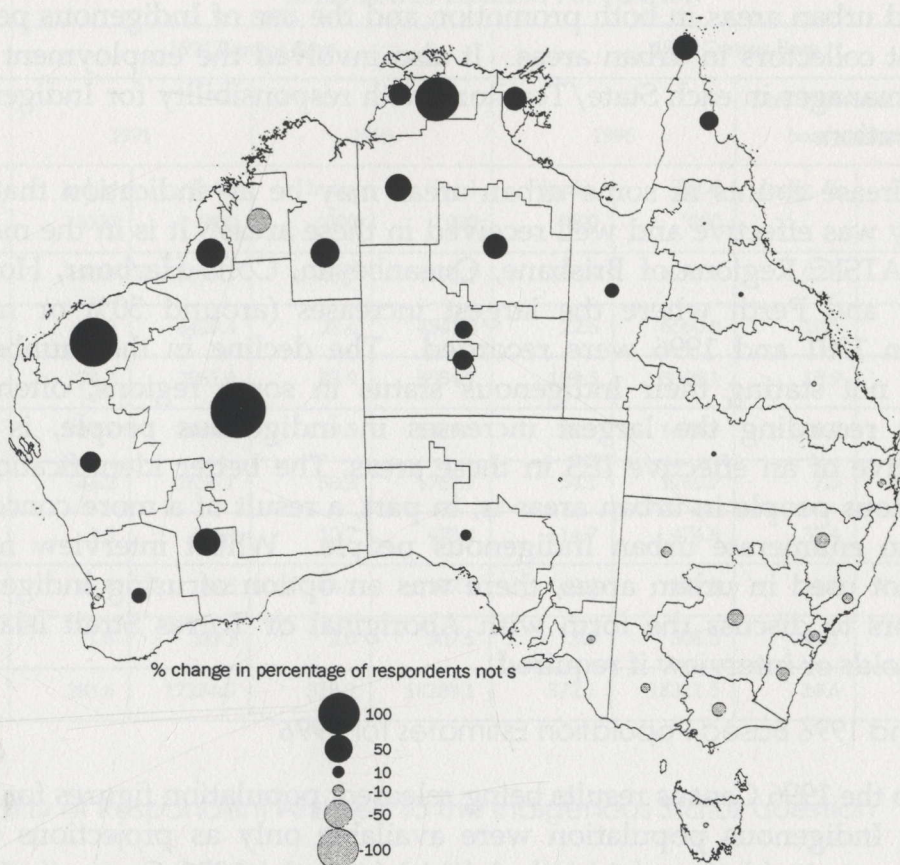


Figure 6: Percentage Increase in the Proportion of People with a 'Not Stated' Response to the Indigenous Status Question, ATSC Regions, 1991-1996



### The Indigenous Enumeration Strategy for the 1996 Census

Enumeration of the Indigenous population appears to have improved in 1996 compared with 1991, particularly in urban areas. Since 1976 special efforts have been made in some remote areas of Australia to enumerate the Indigenous population. This has involved interviewing using a specially worded questionnaire. An indicator of the quality of the Indigenous enumeration is the percentage of the population for which Indigenous status is 'not stated'. For most parts of urban and south eastern Australia this declined between 1991 and 1996—suggesting improvements in the quality of Indigenous enumeration. This contrasts with other parts of the country (figure 6). Collection methodologies for the 1996 Census built on those used in the 1991 and earlier Censuses. Aboriginal and Torres Strait

Islander people were recognised as a special target group for a improved enumeration effort and an enhanced Indigenous Enumeration Strategy (IES) was developed to facilitate this. The 1996 strategy specifically targeted urban areas in both promotion and the use of Indigenous people to assist collectors in urban areas. It also involved the employment of a senior manager in each State/Territory with responsibility for Indigenous enumeration.

The increase counts in some urban areas may be an indication that the strategy was effective and well received in these areas. It is in the mostly urban ATSI Regions of Brisbane, Queanbeyan, Coffs Harbour, Hobart, Sydney and Perth where the largest increases (around 50% or more) between 1991 and 1996 were recorded. The decline in the number of people not stating their Indigenous status in some regions, often the regions recording the largest increases in Indigenous people, is also suggestive of an effective IES in these areas. The better identification of Indigenous people in urban areas is, in part, a result of a more concerted effort to enumerate urban Indigenous people. Whilst interview forms were not used in urban areas, there was an option of using Indigenous collectors to discuss the form with Aboriginal or Torres Strait Islander households or interview if required.

#### 1991 and 1996 Based Population Estimates for 1996

Prior to the 1996 Census results being released, population figures for 1996 for the Indigenous population were available only as projections from Indigenous population estimates derived from the 1991 Census. These projections did not (and could not) anticipate the increases in counts in the 1996 Census. As a consequence the 1991-base projections to 1996, are generally lower than the 1996 Census-based population estimates for the same dates.

This is illustrated in the right-hand columns of the table below. Table 2 shows 1996 population estimates based on both 1991 and 1996 Census counts. The penultimate column of this table indicates that the difference between the 1991 and 1996 based Indigenous ERP for 30 June 1996 varies from less than 2% for the NT to 20% and more for Queensland and NSW, and more than 30% for ACT and Tasmania.

Table 2: Estimated Resident Populations for the Indigenous and Total Australian Populations

	E3 ESTIMATED RESIDENT POPULATION							
	1991 Census Base				1996 Census Base			
	1991		1996		1996		Diff. 1991 base & 1996 base estimates	
	Indig. '000	Total '000	Indig '000	Total '000	Indig. '000	Total '000	Indig. %	Total %
NSW	75.0	5898.7	83.5	6190.2	106.3	6203.9	27.3	0.2
Vic	17.9	4420.4	20.4	4541.0	22.6	4560.8	10.5	0.4
Qld	74.2	2961.0	83.9	3354.7	100.5	3339.1	19.9	-0.5
SA	17.2	1446.3	19.5	1479.2	21.3	1474.4	8.9	-0.3
WA	44.2	1636.1	50.3	1762.7	54.1	1765.7	7.5	0.2
Tas	9.5	466.8	10.7	473.4	14.7	474.6	37.4	0.3
NT	43.8	165.5	48.7	177.7	49.6	181.9	1.8	2.4
ACT	1.6	289.3	2.0	307.5	3.0	308.0	44.1	0.2
Aust	283.6	17284.0	319.2	18289.1	372.1	18311.5	16.6	0.1

### Volatility of Respondent Answers to the Indigenous Status question

One indication of the degree to which individual respondents can change their answers to the Census questions is found in a survey conducted three weeks after the Census date. This survey repeats some questions from the Census to about 80,000 people. Based on this survey, which is conducted throughout Australia except in the most remote areas, 16% of people who said they were Indigenous in the Census changed their response to non-Indigenous when interviewed in the survey. 8% of people who said they were Indigenous in the post-censal survey had not reported Indigenous origin in the Census (Table 3). Some of these changes may be due to the effect of having someone else ask the question, rather than filling in a form in private. This volatility is further complicated by there being a much larger total number of respondents who did not answer the Indigenous question in the 1996 Census (525,403) compared with those who said that they were Indigenous (352,970).

Table 3: Census and Post-Census Survey Responses to the Indigenous Origin Question

Census and Post-Census Survey Responses to the Indigenous Status Question				
Census Response				
	Non-Indigenous	Indigenous	Not Stated	Total
Post-Census Survey				
Non-Indigenous	79298	237	1176	80711
Indigenous	91	1245	24	1360
Not Stated	135	0	4	139
Total	79524	1482	1204	82210

#### Methodology for Estimates and Projections

Population estimates and projections for the Indigenous population beyond Census years require a number of assumptions to be made. Not least amongst these is the allocation, to Indigenous or non-Indigenous, of the half a million or so individuals who did not indicate their Indigenous status on their Census forms. This is currently done by a form of proportional allocation. In the future this allocation may be achieved through a more sophisticated statistical procedure.

Another decision to be made is whether the population to be estimated is to behave like a biological population or is a self-constructed social group. If the former, corrections to counts may be necessary to satisfy certain well known demographic phenomena, such as predictable changes in the population's sex-ratio with increasing age. Such constraints do not necessarily apply to non-biological populations.

The approach currently adopted by ABS is to produce its experimental ERP for the Indigenous population as a biological population based on the most recent Census. Because increases in counts between successive recent Censuses are larger than biological growth, experimental Indigenous projections (or back estimates) based on successive Censuses are not coincident. Indeed, the Census counts for the last four Censuses would lead

to four different sets of population projections for future (and previous years). These population projection lines would be offset from one another by approximately the extent of the non-biological intercensal increase.

The differences between sets of population projections causes considerable difficulty for Indigenous statistics, not only for determining the most appropriate future population figures for benchmarking purposes, but also for selecting a denominator for determining rate statistics.

These difficulties could be overcome if population estimates and projections incorporated factors which accounted for the changing identification patterns of Indigenous people in censuses which appears to be a fact of life, at least for the past generation. There is, in fact, no particular difficulty in changing the estimation methodology. The difficulty is to obtain the data which would satisfactorily monitor on-going changes in the identification behaviour of people, or to find some way of predicting this into the future.

### Possible Review of ABS Standard for Indigenous Status

Early in 1998, the ABS will undertake a review of the Indigenous Status Standard and the question which is currently used in all ABS collections and is recommended for use outside ABS.

The first phase will consider whether there is sufficient need or demand from users and key stakeholders to review the standard. If the need for a review is established, an extensive consultation exercise will be undertaken which will explore possible alternative options. These options will be refined to a small number, which will then be tested through focus groups and a pilot field survey. The tests will focus on reliability of responses from respondents. The Standard will only be changed if a clear overall advantage (in terms of criteria such as reliability, respondent preference, preference by key stakeholders including Indigenous groups, etc) of a new approach compared with the existing approach.

### Possible Alternative Questions

As indicated above, the ABS is considering whether there is a case for reviewing its standard for Indigenous status prior to the next Census in 2001. The case must first be established but there are a large number of possible approaches to constructing questions that might be considered

and there are many stakeholders, Indigenous and non-Indigenous, who might have a view on appropriate approaches.

An ideal standard question(s) would have the endorsement of Indigenous groups and other key stakeholders and would function satisfactorily in both the ABS Census and survey environment and well as the administrative collection setting. This may be difficult to achieve but should remain the goal.

## Uncertainties Attached to Administrative Data

Over the past two years there has been growing recognition that large-scale social surveys are not necessarily the most useful or cost-effective vehicles for collecting the statistical information about Indigenous people that is required. Whilst the ABS is seeking resources to repeat a National Aboriginal and Torres Strait Islander Survey in 2000, more data about Indigenous social outcomes must be obtained as by-products from government administrative systems. The urgency for improving administrative statistics is heightened by the recent increase in emphasis governments are placing on monitoring performance.

### Absence of Quality Control and Best Practice

The key to achieving high quality Indigenous statistics from administrative collections has long been recognised as a data quality issue. There are two tasks. The first is to collect complete and accurate information about Indigenous status in administrative data sets. The second is to introduce routine quality control procedures from which the completeness with which Indigenous people are accurately identified can be estimated.

### Death Notifications and Estimating Mortality

Administrative data has been recognised as the appropriate approach for a number of decades for certain types of data, notably death notification data from which mortality statistics are derived. Progress has been slow. Even for death notifications improvements have come slowly and there has been little progress in some states for more than five years.

A notable exception has been the recent rapid progress with improving death (and birth) notification in Queensland. Prior to 1996 Queensland vitals notification systems did not include identifiers for Aboriginal and

Torres Strait Islander people. Since their introduction in early 1996 the quality of Indigenous vitals registrations appears to be approaching that of the best states and territories in the country and is already of publishable quality for births and approaching publishable quality for deaths. One of the key factors in this rapid progress appears to have been the creation of a broad-based working group chaired by an Indigenous person to promote improved completeness of identification amongst health related records, including births and deaths.

An interesting approach to estimating Indigenous mortality has been adopted by some analysts in recent years, including within ABS. This approach estimates Indigenous mortality by comparing cohorts of Indigenous people in successive Censuses. The method is not straightforward but shows reasonable consistency when compared with Indigenous mortality estimates derived using conventional methods. While there is no substitute for estimating mortality directly from high quality death data, the method offers some prospect of providing at least a broad indication of the level of Indigenous mortality for those states where Indigenous deaths are currently poorly recorded. However, the most urgent need remains the improvement of data quality for Indigenous deaths throughout Australia.

#### Improving Indigenous Identification in Administrative Collections

The ABS recognises the increasing importance of administrative data sources for Indigenous statistics and has recently (July 1997) allocated resources specifically to tackle this issue. Resources are also provided for this purpose by the Commonwealth Department of Health and Family Services and by the Australian Institute of Health and Welfare, and by the Australian Health Ministers' Advisory Council. The focus of these renewed efforts to improve the quality of Indigenous identification is the ABS' National Centre for Aboriginal and Torres Strait Islander Statistics and its companion joint ABS/AIHW Aboriginal and Torres Strait Islander Health and Welfare Information Unit, both based in the Darwin office of ABS.

Working Groups are being set up in all States and Territories by the local ABS Regional Directors with the aim of facilitating the state's efforts to improve the quality of Indigenous data from administrative collections. The current focus of the groups will be health data and the Groups will



seek to involve local Indigenous organisations, state Health Departments, and Registrars of Births and Deaths, amongst others. The initial priority for these groups is to devise and implement procedure to improve the completeness with which Indigenous status is accurately recorded on death notifications.

Other planned initiatives for the near future concerned with Indigenous statistics from administrative collections are AHMAC and DHFS funded projects concerned with improving identification in hospitals separations collections and in disability data sets.

ABS is currently considering further increasing its efforts in these areas in the coming financial year. If further resources are forthcoming they will be used to expand work on Indigenous identification into other subject matter areas, including courts and corrections, and education and training administrative collections.

#### The National Aboriginal and Torres Strait Islander Health Information Plan

An important initiative currently underway concerns the development of a National Plan for the improvement of Aboriginal and Torres Strait Islander Health Information across the full range of Indigenous health data, including administrative collections. This plan, commissioned by AHMAC, was developed after three rounds of national consultation with all significant stakeholders. The plan identifies a range of issues on which achievements are required. The plan, currently in draft form, has been approved by AHMAC and passed on to Ministers for their approval prior to its publication. The plan does not identify any completely new initiatives but highlights the need for a concerted and sustained national effort to improve Indigenous health data. Furthermore, implementing the recommendations of the plan is seen as a mainstream—not a specialist Indigenous Unit—responsibility. This has been accepted by AHMAC and the National Health Information Management Groups have been charged with, and have accepted, the task of overseeing the implementation of the plan.

#### Denominator Shift

When statistics are derived from data of uncertain quality, particularly data which have reporting or other problems, there is a grave danger that

the statistics may mislead and result in incorrect inferences and wrong decisions. The greatest disservice that Indigenous health statistics could do for Indigenous health would be to suggest major reductions in, say, Indigenous mortality, were occurring when in fact mortality were unchanged. Such a false message could, if not detected and corrected, lead to inappropriate resourcing decisions.

Such a scenario is not impossible if the numerator (numbers of deaths derived from registered death notifications for Indigenous people) and the denominator (population estimates derived from Indigenous Census counts) are not based on a similarly constructed population group. Thus a large increase in the 1996 population estimate would manifest itself in the death rates as a significant decline unless the number of deaths were subject to the same discrete increase as the 1996 Census count and population estimates.

All users of Indigenous ratio statistics, particularly health statistics, based on numerators derived from administrative collections and denominators from Census-based population estimates should be aware of possibly spurious dramatic declines in some statistical trends when they are updated from 1995 to 1996. Any decline should be treated with scepticism until the possibility of asynchronous changes in Indigenous identification in the numerator and denominator has been investigated and ruled out as the cause of any apparent changes. There is a danger that if this is not done that Indigenous health outcomes will apparently be miraculously 'improved' or 'solved' by a statistical or demographic sleight of hand.

### A Key Issue for Future Indigenous Statistical Effort

The above discussion emphasised the paramount importance of the coincidence of definition and operation procedures for Indigenous status (which include respondents' willingness to identify) in, on the one hand, numerator statistics derived from administrative collections and, on the other hand, for denominators statistics derived from Census counts. More than any other single issue in Indigenous statistics this coincidence of approach would seem to be the priority requirement. Ways of achieving this coincidence must be formulated, researched and tested.

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